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Charter School Tax Credit:

Investing in Human Capital

Ian Galloway

Federal Reserve Bank of San Francisco

December 2010

Working Paper 2010-08

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Table of Contents

Charter School Tax Credit

Community development finance leverages government subsidy programs to raise market-rate capital to fund community revitalization projects. This financing supports a flexible network of community development service providers (such as affordable housing developers) administered through a series of public-private partnerships. This network-driven approach to revitalizing low-income communities has been very effective and could be adapted to support the growth of innovative and effective charter schools serving high-poverty students as well.

Among the resources available to community development finance practitioners, investment tax credits may be the most important. Investment tax credit structures are used to raise private capital to fund public projects, price risk, protect against program failure, and induce greater public-private cooperation. The federal government administers two public-private anti-poverty investment tax credit programs: the Low Income Housing Tax Credit (LIHTC) and the New Markets Tax Credit (NMTC). They finance, respectively, affordable housing and economic development in low-income communities.

The public-private investment tax credit structure allows the government to fund social programs on a conditional basis. Specifically, if a project fails to deliver the desired social outcomes (affordable housing or economic development, depending on the program), tax credit investors face credit recapture and financial losses. Either way, the government spends money only on successes and not on failures.[1]

Anti-poverty investment tax credits shift program failure risk from the government to the private sector. In exchange for taking on this risk, private investors receive a tax reduction significant enough to generate investor demand. This has two significant public advantages. First, it imposes market discipline on the provision of public services. The government is not always in the best position to evaluate publicly-funded programs; private investors may underwrite these programs more effectively. Second, these models create a structure for government to invest in programs that may not fully "pay out" for many years after the initial investment is made. LIHTC-financed developments, for example, are required to produce a public benefit (affordable housing) for a minimum of 15 years.

This paper outlines how such an investment structure might be used to solve a different challenge: chronic academic underachievement among low-income students. The academic achievement gap is well documented and seemingly intractable. Low-income students do consistently worse than their middle and upper-income peers in all measures of academic success at every grade level, including standardized test scores, high school graduation rates, and college completion rates.[2]

A number of social and education reforms have been offered to help close the achievement gap. This paper will not attempt to add to this voluminous history; rather, it will explore a new approach to financing schools that demonstrate success in closing the gap. It will also deliberately steer clear of any discussion of pedagogy. Curriculum reform is beyond the scope of this proposal as well.

That said, this paper will focus on a particular type of school–charters–because many have demonstrated success serving low-income students.[3] Readers should not interpret this as an endorsement of charters over traditional public schools. Rather, the focus on charters is an attempt to narrow the scope of this proposal to induce more constructive analysis of a financing mechanism that, although not discussed here, could potentially be used to finance traditional public schools as well (or any number of human capital programs, such as those that focus on early childhood).

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1 Social Finance, a financial advisory service provider in the United Kingdom, is experimenting with a similar concept, known as the Social Impact Bond. Social Impact Bonds raise private investment capital to fund anti-recidivism programs. If the programs succeed, investors are rewarded with a portion of the resulting public savings. If they do not, investors suffer losses. For more information on the Social Impact Bond program see: Emily Bolton and Louise Savell, *Towards a New Social Economy: Blended Value Creation through Social Impact Bonds* (London: Social Finance, March 2010), available at www.socialfinance.org.uk/downloads/Towards_A_New_Social_Economy_web.pdf?phpMyAdmin=53fcc4cffa4a2t4642c4adr430f.

2 Editorial Projects in Education Research Center, "Achievement Gap" (*Education Week*: September 10, 2004), available at www.edweek.org/ew/issues/achievement-gap/.

3 Center for Research on Education Outcomes (CREDO), *Multiple Choice: Charter School Performance in 16 States*, (Stanford, CA: Stanford University, 2009), p. 7, available at credo.stanford.edu/reports/MULTIPLE_CHOICE_CREDO.pdf.

In essence, this proposal combines two existing policy tools–investment tax credits and charter schools–to raise operating funds for high-achieving charters that demonstrate success in closing the poverty-related academic achievement gap. Low-income students consistently underachieve academically. In some cases, however, charter schools that serve high-poverty communities have succeeded in dramatically improving low-income student performance. These successful charters differ dramatically in type and approach. As a result, it is difficult to identify a single, or combination of variables, in any one charter that, if replicated, would produce the same results across the public school system. This proposal acknowledges the difficulty of so-called "silver bullet" program replication and considers an alternative: cultivating a diverse array of education approaches using tools developed by the community development finance industry over the last 30 years.[4]

This paper proceeds as follows: Part I examines the poverty-related academic achievement gap and outlines a new role for charter schools serving high-poverty students; Part II explores how an investment tax credit could be used to grow a network of high-achieving charters that serve low-income communities; Part III details its mechanics; and Part IV discusses its strengths and weaknesses.

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4 The challenge of "silver bullet" social program replication is described in detail by Jeffrey Bradach, co-founder of The Bridgespan Group, in a 2003 Stanford University *Social Innovation Review* article. Bradach writes, "The objective [of replication] is to reproduce a successful program's results, not to slavishly recreate every one of its features." Jeffery Bradach, "Going to Scale: The Challenge of Replicating Social Programs," *Social Innovation Review*, (Stanford University, Spring 2003), p. 19, available at www.ssireview.org/images/articles/2003SP_feature_bradach.pdf.

Part I: Closing the Poverty Achievement Gap

An epidemic of underachievement

Students in the United States are dropping out of high school at an alarming rate: 1.2 million a year, by one estimate.[5] High school dropouts are more likely to be unemployed, go to prison, and seek government support.[6] As a result, "the individual and social costs of ignoring high school dropouts–or of focusing attention and resources only on those who show up in the criminal justice and welfare systems–are enormous."[7] According to a 2009 report by the Center for Labor Market Studies, the average high school dropout costs the government $292,000 over his or her working lifetime in lower tax revenue, public assistance, and incarceration costs.[8]

The drop-out problem is particularly acute in low-income communities. Poor students drop out of high school at six times the rate of their more affluent peers.[9] This leads to increased income inequality, perpetuating the cycle of poverty.[10] A recent Brookings Institution study calculated that over the course of a 45-year career high school dropouts earn $700,000 less than their counterparts with diplomas.[11] It follows, as many education and poverty experts have argued, that increasing the high school graduation rate of low-income children would have a profound anti-poverty effect. "Education is our path out of poverty," according to U.S. Secretary of Education Arne Duncan.[12]

Admittedly, the role of schools in low-income student achievement is still hotly debated. Low-income students tend to receive less academic support at home than higher-income students. For example, the average middle-class child enters first grade with 1,000-1,700 hours of one-on-one picture-book reading, whereas a child from a low-income family averages only 25 hours.[13] Likewise, in a widely-cited 2003 report, Betty Hart and Todd Risley found that, by age three, the underprivileged children they studied had heard an estimated 30 million fewer words than their

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5 Editorial Projects in Education Research Center, *Diplomas Count 2008: School to College: Can State P-16 Councils Ease the Transition?* (Bethesda, MD: *Education Week*, 2008).

6 Alliance for Excellent Education, *The High Cost of High School Dropouts: What the Nation Pays for Inadequate High Schools* (Issue Brief, October 2007), available at http://www.all4ed.org/files/archive/publications/HighCost.pdf.

7 Dan Bloom and Ron Haskins, *Policy Brief: Helping High School Dropouts Improve Their Prospects* (Princeton: The Future of Children, Spring 2010), p. 5, available at www.brookings.edu/~/media/Files/rc/papers/2010/0427_helping_dropouts_haskins/0427_helping_dropouts_haskins.pdf.

8 $6,087 in annual federal, state, and local tax payments and $6,197 annual cash and in-kind transfers plus imposed incarceration costs among adults 18-64. Andrew Sum, et al., *The Consequences of Dropping Out of High School* (Boston: Northeastern University, October 2009), p. 14, available at www.clms.neu.edu/publication/documents/The_Consequences_of_Dropping_Out_of_High_School.pdf. See also: L. J. Lochner and E. Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-reports," *American Economic Review*, 94(1), 2004, p. 155–189. See also: James J. Heckman and Dimitriy V. Masterov, *The Productivity Argument for Investing in Young Children* (T.W. Schultz Award Lecture at the Allied Social Sciences Association annual meeting, Chicago, January 5-7, 2007), available at jenni.uchicago.edu/human-inequality/papers/Heckman_final_all_wp_2007-03-22c_jsb.pdf.

9 US Department of Education, National Center for Education Statistics, *The Condition of Education 2004* (Washington, DC: U.S. Government Printing Office, Indicator 10, 2004), p. 11.

10 See Robert Balfanz and Nettie Legters, *Locating the Dropout Crisis* (Baltimore, MD: Johns Hopkins University, CESPAR, Report 70, September 2004), p. 1: "In each of the [high poverty] locations listed above, close to half of the high school students do not graduate, let alone leave high school prepared to fully participate in civic life. It is no coincidence that these locales are gripped by high rates of unemployment, crime, ill health, and chronic despair. For many in these and other areas, the only real and lasting pipeline out of poverty in modern America, a solid high school education followed by post secondary schooling or training, is cracked and broken," available at www.csos.jhu.edu/crespar/techReports/Report70.pdf. See also: John M. Bridgeland, John J. DiIulio, Jr., and Karen Burke Morison, *The Silent Epidemic: Perspectives of High School Graduates*, (Washington: Civic Enterprises, March 2006), p. 2, "Students who drop out of high school are…twice as likely as high school graduates to slip into poverty from one year to the next," available at www.civicenterprises.net/pdfs/thesilentepidemic3-06.pdf. Also: Alison H. Dickson, et al., *Earnings and Poverty Consequences of Dropping Out of High School in the Los Angeles Metro Area* (Boston: Center for Labor Market Studies, Northeastern University, 2009), p. 36: "Most dropouts are unable to attain the level of economic success that is accomplished by their better-educated counterparts, and consequently are vulnerable to earning less over their working lifetime and falling into poverty for a prolonged period of time," available at cdd.lacity.org/pdfs/Oct09_DropoutsPathtoPoverty.pdf#zoom=75.

11 Bloom and Haskins, *Policy Brief*, p. 2.

12 Speech about Race to the Top in Washington, DC on January 19, 2010, reported on by Karen Piper, *The Examiner*, available at www.examiner.com/charter-schools-in-national/president-obama-to-ask-congress-for-1-35-billion-to-extend-race-to-the-top-for-2011. Secretary Duncan's sentiment is similar to that offered by Federal Reserve Chairman Ben Bernanke in a December 10, 2010 interview on *60 Minutes*: "[Income disparity] is a very bad development. It's creating two societies. And it's based very much, I think, on educational differences. The unemployment rate we've been talking about. If you're a college graduate, unemployment is five percent. If you're a high school graduate, it's ten percent or more. It's a very big difference. It leads to an unequal society and a society which doesn't have the cohesion that we'd like to see." Interview transcript is available at www.cbsnews.com/stories/2010/12/03/60minutes/main7114229_page4.shtml?tag=contentMain;contentBody.

13 The Harlem Children Zone, Whatever It Takes, p. 8.

more privileged peers.[14] Some argue that schools should be responsible for remedying this academic deficit, while others discount the impact that schools can make when students arrive so unprepared to learn.[15] Even skeptics acknowledge, however, that while schools alone may not be sufficient to close the academic gap, they are certainly a necessary part of the solution.

School failure and reform

Roughly 2000 public high schools (approximately 13 percent) produce 51 percent of America's dropouts. These "dropout factories" consistently lose more than 40 percent of their students between ninth and twelfth grades.[16] Perhaps not surprisingly, the vast majority of these schools operate in high-poverty communities: "Nearly 90% of high schools with very low graduation rates educate large numbers of low-income students," according to the Center for Social Organization of Schools at Johns Hopkins University.[17]

Low graduation rates are only part of the story, however. The National Center for Education Statistics (NCES), responsible for collecting education data for the U.S. Department of Education, publishes *The Condition of Education*, an annual public school assessment report. In its 2010 report, the NCES highlighted several additional ways in which low-income students are underperforming academically including reading, math, visual arts, and four-year college attendance.[18] In short, many high-poverty schools consistently deliver sub-par academic results, across a number of criteria, contributing to the ongoing academic achievement gap.

Concerned experts have advocated for substantial education reforms to address this gap. The most common reforms involve smaller classes and schools, greater incorporation of early-childhood programs, more rigorous academic standards, improved teacher quality, and more challenging course offerings.[19] Such reforms are difficult to scale, however, because public education is decentralized in the United States. Each state sets its own curriculum standards, and local control of schools–administered by superintendents, school boards, principals, and parents– is a central feature of the American education model. This inability to achieve system-wide improvements threatens reform efforts and risks "superficial impact," which is, "pleasant, but ultimately pointless," according to the Center for Social Organization of Schools.[20]

Charters: an alternative approach

By design, charter schools are public schools that operate outside the normal public school governance structure and have the freedom to experiment with many aspects of the education delivery model. There are currently more than 4,900 charter schools serving 1.6 million children in 39 states.[21] These charters take a variety of forms, including

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14 Betty Hart and Todd Risley, "The Early Catastrophe: The 30 Million Word Gap," *American Educator*, vol. 27 no. 1, Spring 2003, pp. 4-9.

15 Richard Rothstein, "Whose Problem is Poverty?" *Education Leadership* (Alexandria, VA: ASCD, vol. 65 no. 7, April 2008), available at www.ascd.org/publications/educational-leadership/apr08/vol65/num07/Whose-Problem-Is-Poverty%C2%A2.aspx.

16 Alliance for Excellent Education, "Dropout Factories," available at www.all4ed.org/about_the_crisis/schools/dropout.

17 Robert Balfanz and Nettie Legters, *The Graduation Gap: Using Promoting Power to Examine the Number and Characteristics of High Schools with High and Low Graduation Rates in the Nation and Each State* (Baltimore, MD: Johns Hopkins University, CSOS Policy Brief, January 2005), p. 2, available at web.jhu.edu/bin/i/j/Policy_Brief.pdf.

18 S. Aud, W. Hussar, M. Planty, T. Snyder, K. Bianco, M. Fox, L. Frohlich, J. Kemp, and L. Drake, *The Condition of Education 2010* (Washington: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, NCES 2010-028), p. iv, available at nces.ed.gov/pubs2010/2010028_1.pdf.

19 D. Viadero and R. Johnston, "Lifting Minority Achievement: Complex Answers," *Education Week*, 19 (30), April 5, 2000, pp. 1, 14-16. For specific examples of education reform, see *Dispelling the Myth*, a report by the Education Trust that profiles public schools that have successfully closed the achievement gap. 2009 and 2010 Dispelling the Myth award winners include: Griegos Elementary School (Albuquerque, NM), which attributes its success to a new culture of high achievement, discipline, and enhanced citizenship; Mary McLeod Bethune Elementary School (New Orleans, LA), which attributes its success to a focus on literacy, recruitment of experienced teachers, community engagement and data-driven academic progress evaluation; George Hall Elementary School (Mobile, AL), which attributes its success to an improved physical environment and additional "structure"; North Godwin Elementary School (Grand Rapids, MI), which attributes its success to rigorous teacher development and ongoing program evaluation; Parks Middle School (Atlanta, GA), which attributes its success to building a culture of support and a focus on math; and Luis Muñoz Rivera Elementary School (New York City, NY), which attributes its success to customized learning techniques and active collaboration among teachers and administrators. The complete list, and previous winners, is available at www.edtrust.org/dc/resources/success-stories.

20 Robert Balfanz and Nettie Legters, *Locating the Dropout Crisis*, (Baltimore, MD: Johns Hopkins University, 2004), p. 1—2, available at web.jhu.edu/bin/i/j/Policy_Brief.pdf.

21 Dynarski, Susan, et al., *Charter Schools: A Report on Rethinking the Federal Role in Education* (Washington: Brown Center on Education Policy at Brookings Institution, December 16, 2010), p. 2, available at www.brookings.edu/~/media/Files/rc/reports/2010/1216_charter_schools/1216_charter_schools.pdf.

"single sex schools, schools for the performing arts, schools for science and technology, bilingual schools, schools for the disabled, schools for drop-outs, and virtual schools where learning takes place online."[22] Many incorporate novel education elements in their curricula and provide wrap-around social services as needed.

Among the most well-known charter organizations is the Knowledge Is Power Program (KIPP), a national network of 99 free, open enrollment, college-preparatory public schools serving more than 26,000 students in 20 states and the District of Columbia.[23] KIPP's mission is to build a "culture of achievement" based on five operating principles known as the Five Pillars. These principles, coupled with a Commitment to Excellence pledge that all students, parents, and teachers must take, "help students from educationally underserved communities develop the knowledge, skills, character and habits needed to succeed in college and the competitive world beyond."[24]

Other charter schools, such as those operated by the Harlem Children's Zone (HCZ), take a more holistic approach. Named "one of the biggest social experiments of our time" by Paul Tough at *The New York Times,* the HCZ provides program participants with a continuous pipeline of reinforcing social and educational services throughout childhood.[25] The pipeline begins with Baby College, targeting children up to age 3, and continues with "in-school, after-school, social-service, health and community-building programs."[26] These services, offered together, represent a massive, coordinated intervention in the lives of HCZ participants and the HCZ district in which they live.

The charter school movement has received significant support from education-reform-minded philanthropists. The HCZ, for example, successfully raised $44 million from private donors to cover two-thirds of its fiscal year 2009 operations budget.[27] Charter Management Organizations (CMOs), like KIPP, have received more than half a billion dollars from foundations over the past decade.[28] This enthusiasm among anti-poverty grantmakers is, at least, partially validated by new data on charter performance. According to the Center for Research on Education Outcomes (CREDO) at Stanford University:

> In our nationally pooled sample, two subgroups fare better in charters than in the traditional system: students in poverty and [English Language Learner] ELL students. This is no small feat. In these cases, our numbers indicate that charter students who fall into these categories are outperforming their [traditional public school] TPS counterparts in both reading and math. These populations, then, have clearly been well served by the introduction of charters into the education landscape.[29]

In light of this data and considering the strong relationship between education and income, it is no surprise that the philanthropic community has embraced charters as a vehicle to combat poverty.

Criticisms of charters

Like traditional public schools, charters succeed and fail on the basis of their unique mix of students, faculty, administration, mission, curriculum, and approach. Some charters have been extremely successful, whereas others have not. Successful schools have been studied and cited as national models to be replicated.[30]

Nevertheless, charters have been the target of strong criticism from traditional public school advocates, such as the National Education Association (NEA), which represents public school teachers, personnel, university faculty, and students training to be teachers. The NEA has voiced concerns about charter effectiveness, accountability, organizational stability, and teacher attrition. In principle, the NEA supports charters but only in so far as they "have the

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22 Ibid.

23 Knowledge is Power Program, "About KIPP," available at www.kipp.org/about-kipp.

24 Knowledge is Power Program, "About KIPP: Five Pillars," available at www.kipp.org/about-kipp/five-pillars.

25 Paul Tough, "The Harlem Project," *The New York Times*, June 20, 2004, available at www.nytimes.com/2004/06/20/magazine/the-harlem-project.html?scp=1&sq=The+Harlem+Project&st=nyt.

26 Harlem Children's Zone, "About Us: The HCZ Project," available at www.hcz.org/about-us/the-hcz-project.

27 The Harlem Children's Zone, *Whatever It Takes: A White Paper on the Harlem Children's Zone* (2009), p. 18, available at www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HCZ%20FINAL%20WHITE%20PAPER%20SHORT%20VERSION.PDF.

28 Education Sector, *Growing Pains: Scaling Up the Nation's Best Charter Schools* (Washington: Education Sector Reports, November, 2009), p. 14, available at www.educationsector.org/sites/default/files/publications/Growing_Pains.pdf.

29 CREDO, *Multiple Choice*, p. 7.

30 Monica Higgins and Frederick M. Hess, "The Challenges for Charter Schools: Replicating Success," (Washington: American Enterprise Institute for Public Policy Research, *Education Outlook*, No. 4, April 2009), p. 1, available at www.aei.org/docLib/04%20EduO%20Higgins-Hess-g.pdf.

potential to facilitate education reforms and develop new and creative teaching methods that can be replicated in traditional public schools for the benefit of all children."[31]

As public schools, charters must give every student that applies an opportunity to attend, either through open enrollment or a lottery. Despite this requirement, critics have charged that charter schools "skim" high-potential students from the larger public school population.[32] Most students access charters through an opt-in application system. As a result, critics argue, they positively select for students with motivated parents (a significant predictor of academic success).[33] This selection bias can be particularly pernicious, critics contend, when charter school applications include essays and personal interviews, as is sometimes the case.

Discipline policies can reinforce these selection effects as well. Unlike traditional public schools, charter schools have more flexibility to expel, or "push out," students for disruptive behavior. A joint-investigation by *Catalyst Chicago* and WBEZ-Chicago, for example, reported that "in 85 percent of charter school cases, students were expelled for less serious offenses that are not eligible for expulsion under [Chicago Public School] rules. Once expelled, charter students are sent back to their neighborhood school by the district's Office of Adjudication."[34] Examples like this, charter critics suggest, indicate that charter schools will tend to have better-motivated, better-behaved students than traditional public schools. For these and other reasons, the NEA, for example, believes "it is difficult–not to mention scientifically invalid–to make blanket comparisons of charter schools to traditional public schools."[35]

Finally, the available evidence suggests many charter schools perform poorly. According to Stanford University's CREDO, 37 percent of charter schools "deliver learning results that are significantly worse" than traditional public schools.[36] In theory, these failing schools should have their charters revoked but, in practice, very few are shuttered. "Despite low test scores, failing charter schools often have powerful and persuasive supporters in their communities who feel strongly that shutting down this school does not serve the best interests of currently enrolled students." Even as many charters excel at serving low-income students, this "authorizing crisis," according to CREDO, "reflects poorly on charter schools as a whole."[37]

Forget the silver bullet

Ray Budde, who is credited with conceiving of charters in 1974, wrote in *Education by Charter: Restructuring School Districts*, "There is a temptation to think that the best way to upgrade American public education would be to implement the key reforms through some kind of 'master plan'." Instead, he argued that "total education reform will probably proceed along a ragged front and in a rather unpredictable manner."[38] Today, charter schools serve as "laboratories that traditional public schools can learn from," presumably to inform a system-wide reform plan to be implemented across all public schools.[39] However, as Budde predicted, replicating these reforms–smaller classes, strict discipline policies, and so on–has been difficult to achieve within the decentralized education system.

As a result, a number of promising strategies have simply become one-off success stories. "The appeal of mitosis-style growth or 'best practice' imitation is undeniable," acknowledge Monica Higgins and Frederick Hess in an American Enterprise Institute policy brief. "Unfortunately, the evidence is that large-scale education reform will not be

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31 National Education Association (NEA), "Issues and Actions: More Issues: Charter Schools," available at www.nea.org/home/16332.htm.

32 A 2009 RAND Corporation study found no evidence that charter schools "skim" the most academically capable students. That finding, however, does not address the argument that parental involvement, and particularly parental involvement in the charter application process, is the variable being selected for, not academic preparedness. The RAND study concedes that "Since these traits are not readily observable, they could be falsely attributed to the charter schools and thus bias the estimate of the impact of charter schools." Ron Zimmer, Brian Gill, Kevin Booker, Stephane Lavertu, Tim R. Sass, John Witte, *Charter Schools in Eight States Effects on Achievement, Attainment, Integration, and Competition* (Santa Monica, CA: RAND Corporation, RAND Education Monograph Series, 2009), p. 53, available at www.rand.org/pubs/monographs/2009/RAND_MG869.pdf.

33 Anne Henderson and Nancy Berla, eds., *A New Generation of Evidence: The Family is Critical to Student Achievement* (Washington: National Committee for Citizens in Education, 1994), available at eric.ed.gov/PDFS/ED375968.pdf.

34 Sarah Karp, "One in Ten Charter Students Transfers Out," *Catalyst Chicago*, November 9, 2010, available at www.catalyst-chicago.org/news/index.php?item=2653&cat=5.

35 NEA, "Charter Schools."

36 CREDO, *Multiple Choice*, p. 1.

37 CREDO, *Multiple Choice*, p. 51.

38 Ray Budde, *Education by Charter: Restructuring School Districts* (Andover, MA: Regional Laboratory for Educational Improvement of the Northeast and Islands, 1988), p. 121, available at www.eric.ed.gov/PDFS/ED295298.pdf.

39 Eileen M. O'Brien and Chuck Dervarics, "Charter Schools: Finding Out the Facts: At a Glance" (Alexandria, VA: Center for Public Education, 2009), available at www.centerforpubliceducation.org/Main-Menu/Organizing-a-school/Charter-schools-Finding-out-the-facts-At-a-glance/default.aspx.

delivered by following such a course. Imitation may be flattering but decades of experience suggest that it is only haltingly effective when it comes to replicating even the most promising educational programs."[40] The inability of the charter movement to deliver replicable innovation–the "sine qua non of successful reform," according to Higgins and Hess–has locked it in a perpetual cycle of experimentation which, in turn, has led to policy inertia.

Given the challenge of unearthing a "silver bullet" solution, it may be time to abandon the laboratory view of charters. Rather than waiting for a system-wide solution to bubble up from a charter school, policy makers could, instead, develop a network of charters that specializes in serving low-income students. Or, to put it another way, charter schools could be used more strategically to buttress the public school system instead of to reform it system-wide.

Current funding levels are inadequate

On average, charter schools receive between 20 and 40 percent less in public funds than traditional public schools.[41] This forces many charters to rely on foundations and private donors to fill funding gaps. Over time, however, "reliance on foundation funding could become a serious barrier to the growth and scaling goals of many Charter Management Organizations," warns the Education Sector, an independent education policy think tank. "As big as they are, even the largest foundations are dwarfed by the $600 billion annual cost of the American elementary and secondary education system."[42] As a result, any serious government intervention to scale the number of successful high-poverty charters will likely require federal government participation.

In fact, the Obama administration has already lobbied to increase federal funding for high functioning charters.[43] The $650 million "Investing in Innovation" fund and $4.35 billion "Race to the Top" competition, included in the 2009 American Recovery and Reinvestment Act, provide funding to high achieving public schools, including charters, and the states that support them.[44] The administration also signaled its commitment to significant education reform for low-income students when it created the "Promise Neighborhoods" initiative to develop twenty "comprehensive neighborhood programs, modeled after the Harlem Children's Zone, designed to combat the effects of poverty and improve education and life outcomes for children, from birth through college."[45] As of this writing, $10 million has been appropriated to the program to be used for planning grants and $210 million has been requested to implement them.

Nevertheless, these federal programs, taken together, still appear to fall short of what is required to reverse widespread academic underachievement in low-income communities. Instead, a new federal funding program, commensurate with the magnitude of the challenge, is needed to deliver resources to a diverse set of charters operating in low-income neighborhoods. Specifically, this paper explores the creation of a new federal investment tax credit program, loosely modeled on the Low Income Housing Tax Credit (LIHTC) program, to raise operating funds for high achieving charters that serve low-income students.

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40 Higgins and Hess, *The Challenge for Charter Schools*, p. 1.

41 Dynarski, *Charter Schools*, p. 4.

42 Education Sector, *Growing Pains*, pp. 14-15.

43 For a summary of the Obama administration's 2011 education budget priorities: www.whitehouse.gov/omb/fy2010_key_education/.

44 Investing in Innovation fund information is available here: https://ed.gov/about/overview/budget/budget10/summary/edlite-section3a.html#whatworks; Race to the Top information available here: www2.ed.gov/programs/racetothetop/executive-summary.pdf.

45 U.S. Department of Education, "Fiscal Year 2010 Budget Summary: Promise Neighborhoods," (Section III. A. Elementary and Secondary Education, May 7, 2009), available at https://ed.gov/about/overview/budget/budget10/summary/edlite-section3a.html#promise.

Part II: Tax Credits – A New Approach to Funding High-Achieving Charters

The federal government spent an average of $1.40 per charter school student in fiscal year 2008-09.[46] This funding, coupled with substantial philanthropic support and state per pupil allocations, may be adequate to support charters as laboratories for experimentation but it is insufficient to maintain a large network of charters, strategically employed to serve the hardest-to-reach students in high-poverty communities. According to the Education Sector:

> Operating funding is paramount. The best charter networks have demonstrated that disadvantaged students can achieve at significantly higher levels than most do now…. But to get those strong results they have had to spend more money than they expected, and more money than has been available to them in many parts of the country. Under the education models of the leading charter networks, it takes more to do more. Public schools that deliver results–charter or otherwise–shouldn't just get equal public funding; they should get additional funding to reflect their additional costs.[47]

Funding a diverse set of charters with different missions and approaches is a significant public finance challenge, however. It is far more common for the government to identify program "gazelles" and then fund their replication–essentially, cloning successful programs writ large. In such cases, identifying the "best" program is crucial given the financial stakes of being wrong. According to the National Charter Research Project at the University of Washington this approach may not be appropriate, however, when it comes to funding charters, which differ dramatically by quality and feature. "Rather than responding to uneven quality in charter schools with centralized solutions, policymakers and funders must think creatively about new regulatory strategies that are appropriate to decentralized systems." The question, then, is how can the government support a decentralized system of charters operating successfully in low-income communities without undermining the operational autonomy that makes them successful? Or, to put it differently, how can the government scale up its funding without also scaling up its centralized control?

Fortunately, this challenge has an instructive precedent. Faced with hundreds of thousands of deteriorating public housing units in the early 1970s, the federal government abandoned its efforts to solve the affordable housing crisis from the top-down with a Washington-based bureaucracy. In its place, federal policymakers embraced a decentralized funding solution: the Low Income Housing Tax Credit.[48]

Low Income Housing Tax Credit

The Low Income Housing Tax Credit (LIHTC), passed as part of the Tax Reform Act of 1986, is a dollar-for-dollar investment tax credit (one dollar of tax credits reduces one dollar of tax liability) designed to increase the construction and rehabilitation of affordable, multifamily rental housing. The credit is allocated to state authorities on a per capita basis and awarded to affordable housing developers according to a scoring system that takes project viability and social impact into account. If awarded a tax credit allocation, developers sell the credits to investors in exchange for project equity. The credits are sold at market value based on a range of factors, including credit recapture risk. Recapture occurs when a project falls out of compliance at any point in the first 15 years of its operation. Compliance is tied directly to rent affordability.[49] To be in compliance a LIHTC-financed project must set aside at least 20 percent of its units to tenants earning less than 50 percent area median income (AMI) or 40 percent to tenants earning less than 60 percent AMI.[50] In practice, most projects that receive LIHTC allocations consist entirely of affordable units because developers receive credits in proportion to the number of affordable units set aside.[51]

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46 Dynarski, *Charter Schools*, p. 6.

47 Education Sector, *Growing Pains*, p. 17.

48 David Erickson, *The Housing Policy Revolution: Networks and Neighborhoods*, (Washington, DC: Urban Institute Press, 2009), pp 90-91.

49 Projects can also fall out of compliance if they are foreclosed upon.

50 *Low Income Housing Tax Credit*, United States Code: Title 26, Section 42, available at frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+26USC42.

51 Ibid.

The LIHTC program has many ancillary benefits, but its main purpose is to subsidize affordable multifamily housing investment.[52] Equity is the riskiest part of a development's financing and the most difficult to secure. To encourage the development of affordable housing, the federal government offers LIHTC investors a tax credit benefit–spread over 10 years–in exchange for upfront equity.[53] Investors earn a return on their investment equal to any discount paid for the credits and can claim a tax deduction for property depreciation as well.[54] Investors receive these benefits as long as the project remains in compliance.

Once they have raised sufficient equity, housing developers can acquire, in combination with other subsidy sources like HOME and CDBG[55] funds, favorable bank loans to finance the remainder of the project (the credits alone rarely cover more than 40-50 percent of the total project cost).[56] These loans would likely not be available without the backstop of equity acquired through the sale of the credits. This is the key benefit of the LIHTC program. With few exceptions, affordable housing projects would be considered too risky to finance with debt absent the equity subsidy.

The program has been a remarkable success. More than 2.4 million affordable units have been built with LIHTC funds since 1987, a number nearly equal to all the federal public housing and HUD-funded units built between 1937 and 2009.[57] According to a 2009 study by Harvard University's Joint Center for Housing Studies, this success stems from the program's unique blend of social welfare policy, local empowerment, and market discipline. "The LIHTC program has successfully harnessed the discipline and incentives of private markets for public purposes and has served as an engine for decentralized and locally responsive policymaking."[58] In 2000, a bipartisan Congressional commission was created to study federal affordable housing policy. In its widely circulated report, the Millennial Housing Commission concluded, "the LIHTC and HOME programs represent true and strong paradigm shift away from some of the less effective federal policies and programs of the past…. States and cities–not the federal government–now determine how to use most housing resources."[59]

Consider one affordable housing project, the Peter Claver Community. In the late 1980s the city of San Francisco was experiencing a sharp rise in low-income, HIV-positive residents in need of affordable housing. To meet this need, the Catholic Charities of the Archdiocese of San Francisco and Mercy Housing partnered to develop 32 fully-furnished private rooms for formerly homeless people diagnosed with HIV and AIDS. The project also included a number of wrap-around services including meal support, counseling, 24-hour nursing care, and financial planning assistance. Grant funding for the Peter Claver Community came from two foundations, the Macy's Corporation, and a private anonymous donor. The remainder of the project construction financing came from the sale of LIHTCs and two conventional bank loans. Once built, the Peter Claver Community's operating funds came from the San Francisco Department of Health and the federal government's Ryan White CARE program for AIDS services. The remainder of the cost was covered by a combination of tenant rents and the U.S. Department of Housing and Urban Development's (HUD) Section 8 subsidized housing program.[60]

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52 These benefits include, but are not limited to, greater neighborhood stability, higher property values, and job creation. These benefits are outlined in a recent article by community development accountant Michael Novogradac, in which he wrote that "research by the National Association of Home Builders (NAHB) in 'The Direct Impact of Home Building and Remodeling on the U.S. Economy,' in October 2008 indicates that building or rehabilitating 100 LIHTC units generates 116 jobs and more than $3.3 million in federal, state and local revenue. NAHB also reports that until the recent financial crisis and resulting slump in the equity market, the LIHTC program was generating about 140,000 jobs annually and $1.5 billion in state and local taxes and other revenues." Michael Novogradac, "Remaking the Case for Tax Credits," *Novogradac Journal of Tax Credits*, II(1), January 2011), available at http://www.novoco.com/journal/2011/01/news_ww_201101.php.

53 Even though investors receive their credits over ten years, projects must remain affordable for a full fifteen years (and sometimes more) to be in compliance.

54 Catherine Such, "Low Income Housing Tax Credits," (San Francisco: Federal Reserve Bank of San Francisco, *Community Investments*, March 2002), available at www.frbsf.org/publications/community/investments/cra02-2/lowincome.pdf.

55 The HOME Investment Partnership Program (HOME) and Community Development Block Grant (CDBG) are federal community redevelopment programs administered by the U.S. Department of Housing and Urban Development (HUD).

56 Erickson, *The Housing Policy Revolution*, p. 89.

57 See National Council for State Housing Agencies (NCSHA) Housing Credit Fact Sheet 2010 available at www.ncsha.org/system/files/resources/Housing+Credit+Fact+Sheet.pdf. See also: Erickson, *The Housing Policy Revolution*, p. xiv.

58 Joint Center for Housing Studies, *The Disruption of the Low-Income Housing Tax Credit Program: Causes, Consequences, Responses, and Proposed Correctives* (Boston: Harvard University, December 2009), p. 13, available at www.jchs.harvard.edu/publications/governmentprograms/disruption_of_the_lihtc_program_2009.pdf.

59 Bipartisan Millennial Housing Commission, *Meeting Our Nation's Housing Challenges: Report of the Bipartisan Millennial Housing Commission* (Washington, DC: 2002), p. 64, available at govinfo.library.unt.edu/mhc/MHCReport.pdf.

60 Erickson, *The Housing Policy Revolution*, pp. 118-120.

The Peter Claver Community project illustrates the important role tax credits can play in funding public-private partnerships. The $830,460 in subsidized equity secured through the sale of the project's tax credits was leveraged to raise an additional $355,000 in private debt financing. This is an extraordinary achievement considering the novelty of the project, which was conceived of in the mid-1980s. Equally impressive is the fact that federal money could be used so effectively to support a specific population with unique needs. At the time, HIV/AIDS was a frightening new disease. Even basic underwriting questions, such as whether HIV-positive tenants could dependably pay rent, were subject to serious debate. That a federally-subsidized multifamily rental housing project could be built in such an uncertain environment is a testament to the subsidy's flexibility as a funding source. A more rigidly proscribed federal program would not allow for such a specialized housing project, complete with wrap-around services, communal facilities, and widespread community buy-in. Further, it offers proof that federal funds can safely finance local strategy–a concept that could be applied to individual charter schools as well.

The LIHTC program is instructive because it demonstrates how the federal government can successfully bring its substantial financial resources to bear on a decentralized, locally-based system of service providers. Three program elements are essential to its success: 1) protecting government from project failure risk; 2) harnessing local knowledge; and 3) creating a market for service providers.[61] A discussion of how these three elements can be adapted to grow a network of high-achieving, high-poverty charter schools is below.

Protects government

Much of the federal funding that goes to support promising educational programs is allocated on an "identify, fund, wait, and see" basis. Take, for example, the School Improvement Grant (SIG) program. The Department of Education awards SIGs to local education agencies (LEAs), which allocate funds to the "persistently-lowest achieving schools."[62] The 2010 Department of Education Appropriations Act provided $546 million for SIGs in fiscal year 2010.[63] To be eligible to participate in the program, recipients of SIGs must subscribe to one of four reform models: turnaround, restart, closure, or transformation. Each model requires very specific changes ranging from administrative restructuring to teacher accountability measures.[64] These compliance parameters reflect an attempt to protect the government from the risk that the reforms may fail. Yet, according to the Center for Education Policy (CEP), "there is no single or simple strategy that is certain to improve low-performing schools." It seems reasonable to assume, therefore, that no matter how closely schools adhere to their SIG reform model, some will fail. This could prove costly to the government because the funds it spends on reform failures are not recoverable.

At the other end of the federal funding spectrum from SIGs are tax credits. Unlike the "identify, fund, wait, and see" approach of SIGs, tax credits protect the government from program failure risk. Tax credits have recapture provisions that allow the government to recover public funds spent on project failures, such as when LIHTC-financed projects fail to maintain rent affordability minimums.

For the most part, charter schools are granted a charter by the state in which they operate, funded for a period of time, and then evaluated–the "identify, fund, wait, and see" approach. This is risky because charters operating in low-income neighborhoods face enormous day-to-day uncertainty. Those that prevail do so because they are flexible and responsive to the unique needs of their students, faculty, and surrounding communities. Crafting a charter funding scheme that attempts to predict which schools will deliver the right mix of curriculum, mission, and pedagogy is inherently difficult.

A charter school tax credit would transfer this failure risk to private investors and, in so doing, eliminate the need to impose universal standards–or "reform models"–on charter operations. Instead, outcome-based compliance targets, as with other tax credit programs, could be instituted in their place. For example, a charter school could be held to a value-added performance standard. U.S. Education Secretary Arne Duncan has recently promoted value-added standards as a way to evaluate teachers, but they could be applied to schools as well. Value-added performance standards are based on "before and after" benchmarks measuring relative progress against an expected

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61 Joint Center, *The Disruption of the LIHTC Program*, p. 7 and Erickson, *The Housing Policy Revolution*, xxii.

62 U.S. Department of Education, "School Improvement Grants," Federal Register, 75 (208), Thursday, October 28, 2010), available at www2.ed.gov/programs/sif/2010-27313.pdf.

63 U.S. Department of Education, "School Improvement Fund," available at www2.ed.gov/programs/sif/index.html.

64 U.S. Department of Education, "School Improvement Grants."

progress baseline. In the case of a charter school tax credit, a value-added achievement minimum could serve as a trigger for recapture. If a twenty percent improvement in math and reading scores is not achieved by year five, for example, the government could have recourse through the recapture process to reclaim the credits from the private investors that purchased them. This outcome-based approach to compliance distills education reform to its core element–academic improvement–and gives charters the operational flexibility to serve their unique markets without exposing the government to the risk that they may fail.

Of course, the more compliance risk private investors take on, the more their expectations for financial return will increase. Mechanically, these expectations are directly reflected in the price of the credit. As risk of failure goes up, investors perceive credits to be worth less and the price the investor is willing to pay for the tax credits goes down. Likewise, as risk of failure goes down, credits become more valuable and pricing goes up. Although these returns come at government expense, this approach is an efficient way to deal with program failure risk.

Consider the following, highly stylized, example. The government has $1 million to spend on a "charter excellence award program." In the past, 75 percent of the program award winners successfully used the funds to improve their students' math and reading scores over five years (the goal of the program), while 25 percent performed no better than their non-award-winning counterparts. In this hypothetical, the government has two options: it can attempt to determine, in advance, which school will be successful and fund it with a grant (the "identify, fund, wait, and see" approach), or it can disburse the funds through a tax credit program.

All else being equal, the first approach–picking correctly–clearly has the most appeal. It is extremely risky, however. If the government miscalculates, it could inadvertently fund an underperformer at the expense of a school that could have used the funds more effectively. In other words, choosing the wrong school would cost the government both directly, in terms of wasted funds, and indirectly, in terms of wasted opportunity.

When the risk of making the wrong choice is factored into the equation, the government's net expected value is only $750,000. In contrast, the tax credit option manages this risk by disbursing funds on a recoverable basis. Under a tax credit program, the charter would sell its credits to private investors for 75 cents on the dollar, reflecting the *perceived* risk that there is a 25 percent chance that the school will underperform. This process raises $750,000 in operating funds for the charter.

After a predetermined compliance period (five years, for example), the school's performance would be evaluated. If the charter is found to be out of compliance, its credits–now held by investors–would be subject to recapture as a penalty.[65] Conversely, if the school achieves the stated goals of the program, its credits would be worth their face value–$1 million–and represent a 6.7 percent simple annualized return on investment (in reduced tax liability) for the investors that purchased them for $750,000 five years prior. Importantly, this does not mean that the school would, in either case, receive $1 million in actual funding. To the contrary, regardless of its compliance status, the school would keep what it raised through the sale of its credits: $750,000, in this case.

At first glance, this may appear to be a worse outcome than funding option one above. In fact, the government is better off because the tax credit smoothes its exposure to "underperformance" risk. Consider the government's risk-adjusted expected value function below:

$$\text{Expected value of "Charter Excellence Award Program"} = 0.25(\$0M) + 0.75(\$1M) = (\$750K)$$

When the risk of making the wrong choice is factored into the equation, the government's net expected value from option one is actually equivalent to the tax credit option ($750,000). All else being equal, the tax credit option is superior because it guarantees that funds will only flow, by virtue of the recapture process, to "excellent" schools and their investors (and never to underperformers).

Admittedly, this hypothetical is overly-simplistic. It does not, for example, take into account transaction costs, such as syndication fees, or, more importantly, any investor profit margin (paying 75 cents on the dollar for an

65 In practice, investors would likely have already received the full value of their credits by the end of the compliance period. Should a recapture event occur, the government would have to retroactively void the credits and hold investors accountable for the equivalent in back taxes.

investment that defaults 25 percent of the time is, at best, a break-even proposition). That said, the government does pay a hidden cost when it takes on program failure risk. In contrast to a nonrecoverable grant, a charter school tax credit program would price that cost and redistribute it in the form of a return on investment. This quasi-market for charter failure risk would, over time, reveal additional information and reduce charter performance uncertainty. As investors consider the menu of charter school investment opportunities available to them, capital would flow from less promising schools to more promising ones. Eventually, investment capital would (in the ideal case) be limited to the schools that, according to the market, have the best chance of succeeding. The key innovation being that public funds are not at risk should the market prove to be wrong.[66]

Harnesses local knowledge and investment

A tax-credit-driven market for charter school program risk would create a financial incentive to accurately predict program success. Such predictions could be based on factors both inside and outside investors' control. For example, a company like Google, based in Silicon Valley, may have access to local neighborhood-level information in nearby East Palo Alto, which is chronically impoverished.[67] This information could allow Google to more accurately predict what type of charter would succeed in East Palo Alto.

In addition to leveraging local information, Google could also materially "change the odds" of a charter's success by making complementary investments in the neighborhood surrounding the school. If, for example, Google decided to locate a server farm in an underinvested part of East Palo Alto, the positive effects on crime, property values, and local economic activity could dramatically improve the chances of a nearby charter school's success. In addition, Google.org, the company's philanthropic arm, could concentrate grants and program-related investments (PRIs) in neighborhood institutions that support young people, such as the Boys and Girls Club or Little League Baseball. Thus, the risk market created by the tax credit would create an incentive not only to accumulate accurate information on charter performance but to make additional investments that generate positive spillover effects in the surrounding community as well.

Of course, a single investor like Google is insufficient to support a charter school tax credit market. Many market participants, each with unique preferences and information, are necessary to ensure market efficiency and credit pricing that accurately reflects investment risk. This includes non-investors, which nonetheless have a direct stake in the success of the community and its schools. Local government service providers, community lenders, non-profit advocacy groups, and business owners should all act in concert to improve student achievement. Absent a direct financial incentive for doing so, however, coordination among these non-investors is difficult. A tax credit would reward investors that successfully coordinate (or indirectly coordinate through a syndicator) these community stakeholders.

Creates a market for service providers

Unlike SIGs, which fund a particular program, tax credits fund process. Affordable housing projects, for example, must differ dramatically in form and function to appeal to local communities. This requires the efficient coupling, decoupling, and recoupling of service providers to meet local housing needs. According to Benson Roberts, Senior Vice President for Policy and Program Development at the Local Initiatives Support Corporation (LISC), a dynamic market, supported by private capital and involving multiple stakeholders, is necessary to deliver this diversity at scale for affordable housing development:

> The [affordable housing production] system is distinctively market driven, locally controlled, and performance-based. It builds sustainable partnerships among nonprofit and for-profit developers, private

66 Another way to think about the credit is as an insurance policy that protects against charter underperformance. Specifically, the government would pay a premium to investors (acting as an insurance agent) in the form of the discount paid for the tax credits. Should a charter underperform, the investor "pays out" in the form of credit recapture. If the charter succeeds, the investor keeps the "premiums"—the value of the discount paid for the credits. All else equal, the government is better off (economically) because of the risk smoothing effects of the insurance policy. More importantly, over time, investors will become better at predicting charter success, causing them to only invest in "good" charters, while weeding out the "bad." Long-term, these market signals will predict (ostensibly better than government can) which charters will excel and which will underperform.

67 Google recently invested $25 million in two LIHTC-financed projects in Sunnyvale, California. "Google recognizes the challenges associated with developing affordable housing in California and is proud to help meet this need by providing LIHTC financing for some of the region's developers," according to Brent Callinicos, Google's vice president and treasurer. Source: Jennifer Dockery, "Google's Investment in Affordable Housing Gets Results," *Novogradac Journal of Tax Credits*, 1(6), June 2010, p. 1, available at www.novoco.com/journal/2010/06/novogradac_jtc_2010-06_lihtc_pg14.pdf.

> lenders and investors, as well as among all levels of government. Attracting private capital is critical to the system, especially when governmental resources are scarce and must be stretched as far as possible. Equally important, private financing provides market discipline, ensuring that projects are properly planned, underwritten, and operated. Successful projects breed further private investment for subsequent activities, replacing the vicious cycle of disinvestment with a virtuous cycle of reinvestment.[68]

The flexible structure of LIHTC supports the development of this adaptive market of providers. Likewise, a charter school tax credit would empower charters to experiment with a number of different educational approaches, thereby creating demand for supportive services and products. This would lay a foundation for a number of novel, dynamic public-private partnerships that, taken together, would constitute a new educational ecosystem similar to the one formed around affordable housing development.

Charters, like any economic producer, face a classic "make or buy" decision when it comes to supportive services and programs. Many charters choose to build internal capacity to deliver services in-house. The HCZ, for example, provides parental workshops, health clinics, pre-kindergarten, and prevention-driven services targeting youth violence, obesity, and asthma. These programs are all funded and staffed internally.

Alternatively, a market for these services could deliver them more efficiently and cost-effectively, freeing charters from the difficult task of retraining education staff to deliver non-education services. A charter school tax credit would provide charters with the financial flexibility to "buy" instead of "make."

A charter operating in a violent neighborhood, for example, could recruit violence prevention experts to educate administrators, teachers, and students alike about problem resolution and discipline strategies. Alternatively, a charter operating in a predominantly Hispanic neighborhood could contract with a language tutoring company to overcome persistent student English proficiency challenges. Or, finally, charters could recruit teacher development providers to train new teachers who are unfamiliar with the unusual challenges that low-income students face. A charter school tax credit would offer a consistent and flexible source of funding with which to pay these and other providers. As an added benefit, the market discipline enforced by the threat of tax credit recapture would create an incentive for providers to compete on price and performance, thus increasing charter purchasing power.

Alternatively, charters could use tax credit funds to extend the school year or reward teachers for being available after normal school hours. They could be used to improve facilities or upgrade technology. Some charters may invest in highly advanced computer labs, for example, complete with personal computing tablets, videoconferencing equipment, and touch-screen blackboards. Others may build performance theaters, music halls, or health clinics (as the HCZ did in partnership with Columbia University's Mailman School of Public Health).[69] Still others may use tax credit funds to pay for necessary but nonstandard classroom supplies, like facial tissues and bandages–supplies that teachers often provide themselves. The flexibility of the tax credit program would provide charters with the operational flexibility to do whatever is necessary to stay in compliance.[70]

That said, many of these service providers, structural investments, and partnerships may be new and untested. This increases the risk that they may be ineffective. Tax credits are an ideal funding solution because they can support wide-ranging innovation without exposing the government to innovation failure risk. In fact, a charter school tax credit could support nearly any kind of reform, no matter how unusual, on one condition: that it has a positive measurable effect on student performance. If it does not, the subsidy is returned, the school loses credibility among its investors, and its chances of raising tax credit funding in the future diminish. This market discipline would underpin the tax-credit-supported charter ecosystem by weeding out ineffective service providers at little risk to the government.

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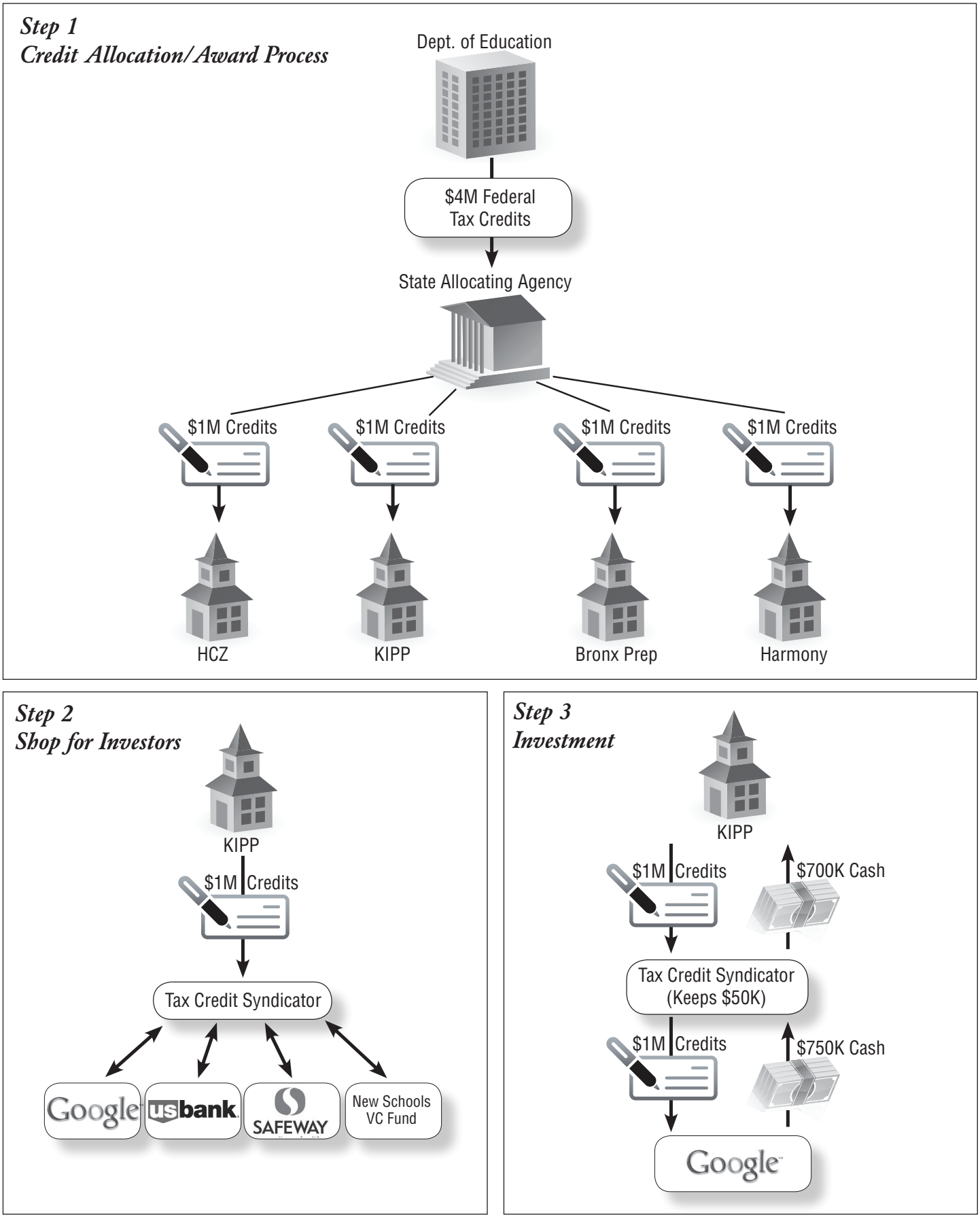
68 Benson Roberts, "Using Federal Funding to Mobilize private Capital," *The Next American Opportunity: Good Policies for a Great America*, (Philadelphia: PA, Opportunity Finance Network, 2008), p. 36, available at http://www.nextamericanopportunity.org/ffi/private-capital/.

69 David Dinkins, "Don't Fear Columbia," *The New York Times*, May 27, 2007, available at www.nytimes.com/2007/05/27/opinion/27CIdinkins.html?_r=1&scp=5&sq=Harlem+Children%27s+Zone&st=nyt.

70 Flexibility is a key element of HCZ's success: "Flexible dollars linked to mutually agreed upon outcomes enable HCZ to respond to newly arising needs with innovative strategies; to redirect unsuccessful approaches towards new strategies; to enhance the quality of programs like our HCZ Promise Academy Charter Schools by supplementing public funding with private dollars; to create new programs, like our College Success Office, where need, but no public funding, exists; to evaluate our programs; and to apply the 'glue' that links our programs in a seamless continuum. The restricted nature of some public funding creates walls between different programs. Flexible funding helps us tear down those walls and take advantage of natural synergies, such as those that exist between parent and early childhood programs. In short, flexibility enables HCZ to function more like a private corporation and less like a bureaucracy." Harlem Children's Zone, *Whatever it Takes*, p. 18.



The charter schools and investors in this diagram are included for illustrative purposes only. The $750,000 cash investment "KIPP" receives from "Google" reflects a credit price of 75 cents on the dollar. The $50,000 syndicator fee is an arbitrary figure.

Part III: Charter School Tax Credit – Program Mechanics

A charter school tax credit program could take many forms. It could be federally allocated or allocated by the states. It could raise money for operating funds or wrap-around social services (or both). It could be allocated annually or at multi-year intervals. It could mirror or radically depart from the LIHTC. As long as its core element–risk mitigation through public-private partnerships–remains in place, the exact nature of the program can be tailored to meet the specific needs of policymakers, charter school administrators, and low-income families. Nevertheless, there are several mechanical elements that should be considered when crafting an investment tax credit program. These elements include: 1) program cost; 2) credit allocation process; 3) credit award process; 4) program compliance requirements; 5) credit recapture process; 6) program compliance period; 7) pricing; and 8) expected market participants. The following section briefly discusses these mechanics.

Program cost

The program's budget should reflect policymakers' desired level of impact and its overall efficacy as a funding mechanism. More broadly, though, it should take into account the ongoing cost of the status quo. Over their working lifetimes, high school dropouts–who are largely low-income–cost the government, on average, $292,000 in lower tax revenue, incarceration costs, and social assistance benefits. Reducing the number of high school dropouts by even 20 percent would generate over $70 billion in additional public revenue and savings, not including the private benefit ($168 billion in additional income) that the high school graduates would collectively accrue.[71] In effect, the government is faced with a choice: invest in more effective education that can reliably reduce the academic achievement gap, or invest in remedial programs that address myriad anti-social behaviors that often flow from academic underachievement.

The question for policymakers, then, is how much does it cost to close the achievement gap for an individual student? Take two New York City charters as examples: KIPP NYC and the HCZ. KIPP NYC spends, on average, $6,243 per student beyond its state allocation on classroom instruction and support programs.[72] Likewise, the HCZ spends approximately $5,000 per student beyond its state allocation to finance its "HPZ Project," which includes its charter schools and wrap-around services.[73] Extrapolating from these two estimates, a charter school tax credit allocation would have to yield, on average, roughly $5,500 per student in supplementary funds to offset the cost of operating a charter school serving difficult-to-reach students in a high poverty community.[74] The total size of the charter school tax credit program budget would then be a function of how many students are being served and average credit prices.

Credit allocation

Tax credits can be allocated directly by the federal government, or indirectly through designated state authorities. The NMTC program, for example, is administered by the Community Development Financial Institutions Fund (CDFI Fund), a federal entity housed in the U.S. Treasury Department that, in addition to administering the NMTC program on a competitive basis, also awards certified CDFIs financial assistance grants. The LIHTC, in contrast, is administered by State Allocation Agencies (SAAs) according to a formula allocating credits to each state on a per capita basis. SSAs are responsible for allocating the credits to developers, monitoring compliance, and reporting. Penalties for noncompliance are enforced by the Internal Revenue Service (IRS) through the tax code, but program administration is wholly the responsibility of the SAAs.

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71 As discussed in Part 1: 1.2 million students drop out of high school every year. 20 percent of 1.2 million is 240,000 students. 240,000 students multiplied by $292,000, equals $70,080,000,000 in savings. Likewise, 240,000 students multiplied by $700,000 in additional lifetime earnings, equals $168,000,000,000 in additional income.

72 Cost analysis done with KIPP NYC's support by independent nonprofit charity evaluator GiveWell. According to GiveWell's evaluation, KIPP NYC spent $2,373 on classroom instruction in fiscal year 2007-08 and $3,870 on "general support programs." GiveWell, "Knowledge is Power Program," available at http://www.givewell.org/united-states/education/top-charities/KIPP.

73 Harlem Children's Zone, "About Us: The HCZ Project."

74 Admittedly, this an unscientific estimate and is included purely for discussion purposes. The actual cost of serving high-poverty students will differ dramatically by geography and school. Depending upon how the program is designed, state allocating agencies could account for these differences by awarding differing amounts of credits according to where and how a school is operating. Some schools may receive larger credit allocations, for example, if they are operating high-cost areas like New York City, as KIPP NYC and the HCZ do.

A charter school tax credit could be administered at either the federal or state level. At the state level, allocation decisions could be the responsibility of program-specific state agencies or existing ones, like the Local Educational Agencies (LEA) that currently allocate Title I education grant funds.[75] State agencies could receive allocations on a per capita basis, like the LIHTC, or, if the academic achievement gap is not equally distributed across the general population, competitively on the basis of need as the NMTC is.

Award process

Both the LIHTC and NMTC programs award tax credits on a competitive basis (one at the state level and the other at the federal level, respectively). In the case of LIHTC, state tax credit authorities create Qualified Allocation Plans (QAPs) that outline specific affordable housing goals and additional requirements (including environmental sustainability, for example). Project developers submit applications which are scored according to how well they meet the goals and requirements outlined in the QAP. The developers whose applications score highest receive allocations.

In the case of a charter school tax credit, the state authority could have the freedom to weigh certain issues such as the magnitude of the achievement gap or any number of school-related attributes when considering a tax credit application. These additional minimum requirements may allay lingering investor concerns stemming from the unrestricted nature of the funds.[76] In addition, a charter school tax credit program could allow state allocating agencies to vary the size of the award based on specific challenges faced by particular charter schools. This approach would differ from the way that LIHTCs and NMTCs are allocated in that, in both cases, only program participation is subject to competitive review, while credit award sizes are formula-driven.

Compliance

Compliance is the determining factor in the credit recapture decision. Schools that fall out of compliance trigger recapture. Defining and enforcing compliance would, therefore, be a crucial element of a charter school tax credit program. At its core, compliance should reflect progress that is significant and verifiable. Meaningful achievement standards and measurement should, accordingly, underpin compliance. Although these foundational components appear to be fairly straightforward, there is very little agreement on what constitutes "achievement" and how best to measure it.

Academic achievement is generally defined by subject proficiency or graduation. Subject proficiency is typically measured with standardized tests, whereas graduation is determined by classroom performance over a long period of time. By design, standardized subject proficiency testing is considered to be the more objective of the two measures, but there are widespread concerns about its fairness and relevance as a predictor of future success.[77] Graduation is highly predictive of future success but, as a binary measure, it cannot capture improvement or degrees of progress. Graduation is also an end-process event. It is only possible to measure "achievement" in the case of graduation after the education process is complete, leaving no time to alter course should graduation be in jeopardy. Graduation rates can be subject to manipulation, as well. Critics have accused many schools of reclassifying dropouts in order to increase their graduation rates.[78]

Given the financial stakes, compliance would have to be clearly defined and transparent. Objective measures, such as standardized testing, achieve both of these requirements. Although standardized testing remains a controversial method of tracking student achievement, it creates clear benchmarks that can be tracked over time. From a compliance standpoint, this is paramount. To critics, however, this would create a perverse incentive to "teach to the test,"

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75 Title 1 is a federal program that allocates supplementary funds to low-income schools to "ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments." For more information, see the Department of Education's Title 1 description available at www2.ed.gov/policy/elsec/leg/esea02/pg1.html.

76 The tension arising from charters' need for operational freedom and investors' need for oversight may prove to be a significant program hurdle. A QAP-like program requirement may help address this challenge.

77 According to Alfie Kohn, education author and lecturer, "Education concepts such as intrinsic motivation and intellectual exploration are difficult for some minds to grasp, whereas test scores, like sales figures or votes, can be calculated and tracked and used to define success and failure. Broadly speaking, it is easier to measure efficiency than effectiveness, easier to rate how well we're doing something than to ask whether what we're doing makes sense. Not everyone realizes that the process of coming to understand ideas in a classroom is not always linear or quantifiable." Alfie Kohn, *The Case Against Standardized Testing: Raising the Scores, Ruining the Schools* (Portsmouth, NH: Heinemann, 2000). This sentiment is echoed by the National Center for Fair & Open Testing, available at www.fairtest.org/facts/whatwron.htm.

78 Dan Rather, *60 Minutes II*, CBS News, "The Texas Miracle; Texas Schools Cooking the Books?" January 7, 2004.

discounting holistic learning–although any test, standardized or not, is vulnerable to this criticism.[79]

From a practical standpoint, the simplest approach to test calibration would be to adopt a consensus-based federal compliance standard. In order to maximize its investment, the federal government would have an incentive to design a fair test that predicts future academic success and employability. Adopting a universal standard would be controversial, however, and may discourage states from participating in the program. Local control over curriculum standards–and, by extension, testing standards–has been an important component of the public school system for generations and is unlikely to change.

Alternatively, states could design their own compliance tests that reflect a unique set of academic performance preferences (including arts and music testing, for example). If states were empowered to create their own compliance standards, however, they would have a perverse incentive to artificially increase compliance rates. Left unchecked, states could easily engineer their tests to favor success–redefining eighth-grade math proficiency as simple arithmetic, for example. In a 2007 study comparing individual state test results to the Assessment of Educational Progress common standard, the NCES found that differences in state-by-state performance "can be largely attributed to differences in the stringency of their standards."[80] In total, 15 states were identified as having lowered their testing standards to better comply with the No Child Left Behind Act (NCLB), prompting Secretary of Education Arne Duncan to comment that, "at a time when we should be raising standards to compete in the global economy, more states are lowering the bar….We're lying to our children."[81] In an attempt to preserve local control over curriculum standards, NCLB may have inadvertently created an incentive for states to make their proficiency tests easier.

To protect against wholesale standards lowering, a charter school tax credit program could–like the LIHTC–set minimum federal compliance standards, perhaps in math and reading, and leave the rest of the test to the state enforcement agencies. This would be a reasonable compromise, ensuring that the federal government achieves its core goals for the program while providing for the needs of local states and schools.

Compliance period

Ideally, a tax credit program designed to finance education outcomes would begin in early childhood and continue through high school graduation. In this ideal case, the tax credit compliance period would match the funding stream, beginning in pre-kindergarten and continuing uninterrupted until the child's education outcome is definitively known. This would fully align investor goals (return on investment) with those of the government (increasing the high school graduation rate of low-income students). From a practical standpoint, however, this would be difficult to accomplish within the existing charter school structure. With some exceptions, charter schools mimic traditional public schools in how they group students: five grade levels in elementary school, three in middle school, and four in high school. A credit designed to finance a full 12 years of education (or more, if kindergarten or pre-kindergarten were included) would have to be portable as students are promoted from one school to the next. This could destabilize the credit market, however, as investors may balk at the challenge of underwriting multiple schools.

A long compliance period may have a detrimental effect on pricing, as well. A longer term would increase uncertainty and reduce what investors are willing to pay for the credits. Additionally, the longer the investment period, the greater the liquidity and interest rate (cost of capital) risk. Long-term investments are often discounted for these reasons which, in this case, would yield less private capital to finance charter school operations.[82] Therefore, a shorter compliance period may be preferable to a longer one. Mechanically, it would be easiest to issue credits with compliance periods that match the time students spend in a particular school. The size of the school's tax credit issue would, accordingly, be a function of the percentage of low-income students who attend it and how long they are there.

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79 According to K12 Academics, a national education resource website, "Critics also charge that standardized tests encourage 'teaching to the test' at the expense of creativity and in-depth coverage of subjects not on the test," available at www.k12academics.com/standardized-testing.

80 National Center for Education Statistics, *Mapping 2005 State Proficiency Standards Onto the NAEP Scales: Research and Development Report*, (Washington, DC: U.S. Department of Education Institute of Education Sciences, June 2007), p. iii, available at nces.ed.gov/nationsreportcard/pubs/studies/2007482.asp.

81 Kay Mathews, "Due to 'No Child Left Behind' Law, Some States Lowered Standards," *Digital Journal*, October 30, 2009, available at www.digitaljournal.com/article/281335.

82 This has been an ongoing concern with LIHTC as well and was recently cited as "the major obstacle to attracting a larger and more diverse set of corporate investors" in a Joint Center for Housing Studies report. Joint Center, *The Disruption of the LIHTC Program*, p. 30.

Although shortening the compliance period would certainly simplify the program, it may also lead investors to favor some types of schools over others. Middle schools, for example, are often challenging learning environments. Investors may, as a result, shun credits awarded to middle schools and, instead, choose to invest only in elementary schools and high schools. This would create a funding "dead zone" of sorts, which may erase some of the positive gains achieved at the elementary school level and render some students unprepared for the rigors of high school. In theory, the perceived risk of middle school would be reflected in the pricing that middle schools receive for their credits. If the risk is too high, however, pricing will drop to a point where there is no market for the credits. The program would then be ineffective, leaving middle schools underserved.

To increase investor demand, the duration of the compliance period could be moderated by a burn-off provision. Credit burn-offs effectively "lock in" credits based on the achievement of intermediate compliance benchmarks. For example, credits issued to an elementary school may have a five-year program compliance period but, under a burn-off regime, the school could use annual testing to demonstrate progress. As students achieve annual testing benchmarks, investors would lock in an additional year of credits. Recapture, should it occur, would apply only to credits not locked in. This would reduce recapture risk and potentially make the credit more appealing to investors.

The risk with a burn-off provision is that the benchmark tests may not reflect real progress toward ultimate compliance. Annual tests may be easier than the test administered at the end of the compliance period, for example. Furthermore, atomizing achievement measures creates an incentive to implement short-term programs that increase benchmark scoring at the expense of long-term programs that better prepare students for lasting academic success. A charter school tax credit burn-off provision would have to properly align burn-off benchmarks with long-term compliance goals in order to protect against this outcome.

Recapture

Credit recapture occurs when a project falls out of program compliance. In the case of a charter school tax credit, recapture would occur if a school fails to achieve certain predetermined academic benchmarks. Those benchmarks may differ by state (with certain federally-set minimums), but in all cases, failure to achieve them would trigger recapture and lead to financial losses for investors. Accordingly, investors' perception of investment risk would depend upon the likelihood that a given charter will stay in compliance. If that perception of risk is high, pricing for credits will fall. Although this inverse relationship between risk and pricing is appropriate, too much investor uncertainty could cripple the program.

The risk that a charter school tax credit may generate more initial investor uncertainty than existing tax credit programs is high. Unlike LIHTC and NMTC, a charter school tax credit would not finance a physical structure that could act as collateral in the transaction. This is the point of departure between tax credits that finance physical capital and tax credits that finance human capital (of which there are currently none). How this distinction will affect investor demand is unknown but it will likely increase their perception of risk.[83]

Fortunately, there are other ways to reduce recapture risk in the absence of collateral. One, as mentioned earlier, is with a "burn-off" policy–locking in credits as progress benchmarks are achieved in advance of the final compliance review at the end of the compliance period. Another is to allow for a "cure period." A cure period gives investors additional time to "cure" their investments should they fall out of compliance. In practice, this would allow for last-ditch efforts to turn a failing charter around before its credits are recaptured.

Consider an elementary school example. A charter elementary school receives an allocation of credits and, as specified by the program's compliance requirements, has four years to prepare 80 percent of its fourth-grade students for math and reading proficiency at grade level. If the school achieves the benchmark, investors are fully protected from recapture. If, however, the school does not achieve the benchmark, a cure period would allow for a second round of testing a year later (testing the same students at fifth grade proficiency levels). If 80 percent test at

83 While this uncertainty may dampen investor demand, there are examples of functioning markets operating in highly-uncertain environments. Whistleblower claims, for example, generate secondary market activity, as do bankruptcy claims. Investors offer claimants cash immediately at a discount, hoping that when the claim process is completed, it will generate a return in excess of the cash payment. While not necessarily predictive of a charter school tax credit market, it demonstrates that even a high degree of uncertainty can be priced and traded by sophisticated investors. Peter Lattman and Diana Henriques, "Speculators are Eager to Bet on Madoff Claims," *The New York Times*, December 13, 2010, available at dealbook.nytimes.com/2010/12/13/speculators-are-eager-to-bet-on-madoff-claims/.

proficiency, investors retain their credits. If not, the credits are recaptured. A reasonable cure period would alleviate some investor recapture anxiety and help stabilize credit pricing at a sustainable level.[84]

Pricing

Credit pricing will vary depending on the risk of noncompliance (based primarily on the quality of the school selling the credits) and investor demand. As discussed previously, the economic return for investing in charter school tax credits is equivalent to the discount paid for them relative to their face value. This creates an incentive for investors to pay less for credits. Conversely, charter schools have an incentive to demonstrate success to signal lower recapture risk, increasing the price paid for their credits.

Ideally, this will result in a credit price that accurately reflects the school's failure risk. Of course, this assumes a well-functioning market. If, for example, there are too few investors or systemically unreliable charter performance data, the market price for credits could fall dramatically. If the price drops too low, it will yield too little private investment capital, rendering the program ineffective. Accordingly, it would be sensible to set a pricing floor so that, should pricing fall below a certain threshold, the transaction could be voided and the school's credits reallocated. Or, alternatively, schools could reach out to supporting organizations, such as foundations, to fill the funding gap between the credit price and the mandated floor. The government could play a credit enhancement or guarantor role as well, as the Department of Energy does with solar installations and the Department of Education does with charter school facilities loans. Regardless, a mandated pricing floor, gap financing strategy, or credit enhancement program (or some combination of the three) should be in place to ensure that sufficient capital flows to the charters receiving credit allocations and protect against investment speculators in search of windfall profits.

Market participants

The market for tax credit investors could include more traditional investors, such as CRA-motivated banks and insurance companies, but also individuals and corporations.[85] As long as the investor has tax liability, there would be an incentive to participate in the market. Investors could engage schools directly or indirectly through syndicators that have developed expertise in underwriting successful charter schools and marketing credits to investors. Investment syndicators currently play a key role in both NMTC and LIHTC transactions. As intermediaries, syndicators aggregate investor dollars, identify investments, and monitor their portfolios for compliance purposes. Conceivably, charter management organizations (also known as CMOs) could evolve into tax credit syndicators themselves. Instead of just managing schools, as they do today, they could finance and monitor them on behalf of investors.

There may also be an opportunity for other financial partners to participate indirectly in the tax credit transaction. Instead of purchasing a school's credits, for example, a corporate or private donor could sponsor a performing arts center or a teacher excellence award.[86] The donation could be significant enough to affect student performance, thereby increasing the value of the school's tax credits and allowing it to raise additional capital to support its programs. In other words, there could be a layering of investments alongside grants and PRIs that increase the likelihood of good student performance and the full vesting of tax credit benefits.

Government could play a role as well. Public health agencies, for example, could partner with charters to locate health clinics on school property. The clinics could increase student school attendance by improving student health and double as job training centers that inspire students to pursue the hard sciences.[87] Again, this may have a positive effect on student performance, making the school more attractive to tax credit investors.

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84 The NMTC program allows for a 6-month cure period.

85 Despite having consistent tax liability, individuals invest less in LIHTC and NMTC than corporations. This is largely because of passive loss tax rules that limit the amount of credits individuals can claim, but includes other factors, such as the Community Reinvestment Act, which increases the non-financial value of credits to banks (significant investors in tax credits). For additional information concerning the barriers to individual participation in LIHTC see: Ian Galloway, "Create a More Robust Market by Attracting Individual Investors," *Innovative Ideas for Revitalizing the LIHTC Market* (Federal Reserve Bank of St. Louis, 2009), available at www.clevelandfed.org/Community_Development/data/LIHTC_report.pdf.

86 To some extent this is already happening. The Los Angeles Unified School District, for example, has begun to accept corporate sponsorships as a way to close their budget gap. Jennifer Medina, "Los Angeles Schools to Seek Sponsors," *The New York Times*, December 15, 2010, available at www.nytimes.com/2010/12/16/education/16naming.html.

87 A similar multi-use model, though not education-based, was pioneered by the Codman Square Health Center in Dorchester, MA. More information is available at www.codman.org.

Part IV: Strengths and Weaknesses

Strengths

Increases funding for high-performing public schools

High-poverty public school districts receive, on average, $773 less per student, per year, than low-poverty districts.[88] Meanwhile, the schools operating in these districts face significant poverty-related challenges that their low-poverty counterparts do not face. At a minimum, these schools should receive funding parity and, arguably, supplementary funds as well.

The charter school tax credit would deliver additional federal funds to high-achieving public schools that can demonstrate success in closing the academic achievement gap among low-income students. These funds would be (essentially) unrestricted, allowing schools to meet local needs and deliver customized educational services.

Protects government from program failure

By transferring program failure risk to private investors, the charter school tax credit would ensure that every dollar spent is tied directly to a positive, measurable education outcome. This is a significant improvement over the status quo–investing in schools on the basis of past performance or future promise, with no recourse should those assessments prove to be wrong.

This is particularly important during periods of fiscal austerity. In commenting about the LIHTC in 1992, the *Los Angeles Times* argued that the tax credit "forms the cornerstone of the numerous public/private partnerships that are increasingly the salvation of cash-short cities and states."[89] Today, as in 1992, budget deficits are leading to social program cuts. As policymakers seek to balance their budgets going forward, tax credit programs can offer a fiscally-responsible means of funding human capital improvements because funding only flows to programs that work. Further, the benefits this particular tax credit program would generate−better education outcomes for low-income students−is known to save significant public funds in the long run.

Instills performance-based accountability

A charter school tax credit program's compliance requirements would establish benchmarks for success. These benchmarks would reflect specific, measurable goals demonstrating low-income student achievement. These standards would have the dual benefit of allowing the government to monitor improvement but also allowing the school to evaluate its own programs and adjust them as needed. Building this information feedback aspect of the program could be its greatest ancillary benefit, as it would provide consistent, reliable information on what is and what is not working.

Leverages private sources of capital and information for public education

A charter school tax credit program would directly raise private capital to support charter operations. In the end, however, this may prove to be only a fraction of the total funds raised under the umbrella of the program. Low-income student performance is influenced by a host of factors, many outside the direct purview of school. As a result, investors may find complementary community investments to be an effective way to protect their tax credit investment. These investments, combined with the funds raised by the tax credit program, could be sufficient to transform entire neighborhoods, as the Harlem Children's Zone has done in New York City.

A charter school tax credit would also increase the engagement of other stakeholders in the education process, including, among others, local businesses, universities, nonprofits, and neighborhood residents. As is the case with the LIHTC, a charter school tax credit program would create a financial incentive to organize these community stakeholders and leverage their private information. It is also a way to engage them directly in a shared societal goal: better equipped and more productive workers and citizens.

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88 The Education Trust, *Education Watch National Report* (Washington, DC: April 2009), p. 13, available at www.edtrust.org/sites/edtrust.org/files/USA_0_0.pdf.

89 *Los Angeles Times*, editorial, "Housing Credit Extension is a Must—and Riots Tell Us Why," June 2, 1992, B6.

Adaptable to local needs and conditions

Low-income students have unique needs, both academically and socially, and schools that serve low-income students need the operational flexibility to meet them. Likewise, the funding streams that support these schools should be sensitive to this operational diversity and allow for adaptive use. A charter school tax credit program, by virtue of its built-in accountability checks, is the perfect vehicle to deliver such "adaptive" funding. Unlike direct expenditures, which are not recoverable, tax credits allow for experimentation without exposing the government to failure risk. This affords schools the freedom to address local needs without onerous, and potentially restrictive, oversight.

Weaknesses

Pro-cyclical

The primary value of tax credits to investors is that they reduce tax liability. As a result, when tax liability decreases, like during a recession, demand for tax credits decreases. This causes the price for tax credits to drop, sometimes precipitously. As prices drop, sellers receive less for their credits, which can hamper their ability to successfully implement their obligations under the program.

This problem is particularly acute when the tax credit investor base is comprised of a limited number of investors. Over-reliance on a small, homogeneous investor base introduces significant pricing variability, endangering the program during down-market periods.[90] This pro-cyclical pricing challenge can be improved through investor diversification. Different types of investors, both corporate and individual, should be encouraged to participate in the program. This may necessitate a change in tax law, particularly with respect to individuals currently restricted by passive loss rules.[91]

Low initial credit prices

As with many new investment products, charter school tax credits would likely carry a high risk premium that keeps prices low initially. When the LIHTC program was passed in 1987, a dollar's worth of credits only raised $0.45 in project equity.[92] Once the program's risks were better understood, however, pricing steadily increased to over $0.60 by 1996 and continued to rise until it briefly exceeded one dollar before the financial sector crash in 2008. As of October 2010, the average price of a dollar's worth of LIHTCs was just above $0.75.[93]

While it is impossible to predict investor demand, it stands to reason that a charter school tax credit program could see a similar price trajectory over time. As the public-private high-poverty charter school network develops, investors will likely search out charters with track records of high achievement. In the short term, this will increase demand for credits held by a select number of schools, to the detriment of unseasoned or unusual schools with untested programs. However, over time, as more charters demonstrate success, new capital will enter the market, demand for credits will go up, more schools will receive investments, and credit prices will eventually accurately reflect investor risk. Until that pricing equilibrium is achieved, credits will likely remain undervalued and charters may have to reach out to grantmakers to fill program funding gaps.

Achievement difficult to define/quantify/track

The key to a successful charter school tax credit program is to match the program goals–academic improvement–with the program compliance requirements. Although this is seemingly straightforward, there is widespread disagreement about what constitutes academic improvement and how to track it. Most everyone agrees that the ultimate goal of any education program should be young adults who are better prepared for success in life and the workplace. But what are the critical variables that translate into success? High school graduation? Improved literacy? Math proficiency? It is difficult to know which variable, or combination of variables, will lead to success in the long run.

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90 Joint Center, *The Disruption of the LIHTC Program*, p. 20.

91 Galloway, "Create a More Robust Market," p. 25.

92 Pricing based on testimony of James R. White, Associate Director, Tax Policy & Administration Issues, General Government Division, given to the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives, April 23, 1997. Government Accounting Office, "Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program" (GAO/T-GGD/RCED-97-149), p. 7, available at www.novoco.com/low_income_housing/resource_files/research_center/opp_improve_march97.pdf.

93 Novogradac and Company, "LIHTC Facts and Figures," available at www.novoco.com/low_income_housing/facts_figures/index.php.

The answer, then, may be to create a composite compliance dashboard that could include standardized test scores, subjective evaluations, health and wellness measures, attendance rates, and even parental involvement. The advantage of a composite compliance system is that it would allow for a more holistic evaluation of a student's advancement. In order to protect the integrity of the program, however, such a dashboard would have to be constructed and administered in a transparent way that is, to the maximum extent possible, incorruptible by either school officials or their tax credit investors.

Charter scarcity

A charter school tax credit would support charters operating in low-income communities with much-needed supplementary funding. But what about communities without charters? Almost 90 percent of U.S. school districts "have no charter schools within their boundaries, perhaps in large measure because so many school districts are so very small." This tends to disadvantage rural school districts, making charters "largely an urban phenomenon," according to the National Charter School Research Project.[94]

In order to ensure that a charter school tax credit program is equitably administered, some credits should be reserved for new schools. In the short-term this could result in persistently low credit prices. However, over time, the existence of a new, predictable, funding stream should encourage the development of a robust, widely-distributed network of charter schools supported by appropriately high credit prices.

If the LIHTC is any guide, this growth could come quickly. The number of Community Development Corporations, the initial recipients of LIHTCs, roughly doubled–from 1,750 to 3,600– in the 10 years following the creation of the LIHTC program.[95] This rapid growth was only possible–and fiscally responsible–because the government was protected from project failure risk. Although it is not perfectly analogous, a new network of charter schools may see similar growth under a tax credit program.

Likewise, in areas with investor scarcity, increasing demand for the credits should attract capital to more remote geographies. If not, the Community Reinvestment Act's geography-based assessment areas may encourage some banks to seek out charter school tax credit investments (assuming they are CRA-eligible, which they may not be) in underserved communities.

Program participation may strain school administrative capacity

Existing tax credit programs, like LIHTC, are complex. As a result, most tax-credit-financed deals require the participation of accountants, consultants, and lawyers, thus increasing project costs. Schools participating in a tax credit program may encounter similar program complexity, potentially straining administrative capacity and possibly raising program participation costs should outside assistance be needed. Schools are in the education business, not the tax credit finance business. This distinction should be considered as participation and reporting requirements are implemented.

Tension between school and investors–lines of authority unclear

A charter school tax credit program would introduce a new participant–the tax credit investor–to school administration. What role, if any, should the investor have in school policy? On the one hand, educators should manage education-related issues, but on the other, investors will have an interest in protecting their investment. How will school administrators and school investors resolve differences in approach when they arise? The HCZ, for example, is accountable to a Board of Trustees that provides oversight, fundraising, and support to HCZ administrators.[96] Likewise, KIPP schools are individually managed by local boards of directors and a KIPP-trained "school leader."[97] These arrangements may work for HCZ and KIPP but may not be a good fit for all charters. Regardless of how, it is important to address this governance issue in advance to avoid conflict between the two parties.

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94 Jon Christensen, Jacqueline Meijer-Irons, and Robin J. Lake, "The Charter Landscape, 2004-2009," *Hopes, Fears, and Reality: A Balanced Look at American Charter Schools in 2009, 5th ed*. (Bothell, WA: National Charter School Research Project Center on Reinventing Public Education University of Washington Bothell, January 2010), p. 8, available at www.crpe.org/cs/crpe/download/csr_files/pub_ncsrp_hfr09_jan10.pdf. See also: O'Brien, "Charter Schools: Finding out the Facts."

95 Actual estimate of CDCs in 1988 is a range (1,500-2,000). I took the midpoint for simplicity's sake. National Congress for Community Economic Development (NCCED), "Reaching New Heights: Trends and Achievements of Community-Based Development Organizations," *5th National Community Development Census* (Washington, DC: 2005), p. 4, available at www.ncced.org/documents/NCCEDCensus2005FINALReport.pdf.

96 The Bridgespan Group, *Harlem Children's Zone (HCZ): Transforming the Organization While Scaling Up in a Tightly Defined Local Service Area* (Case Study Series, October, 2004), p. 13, available at www.bridgespan.org/LearningCenter/ResourceDetail.aspx?id=338.

97 Knowledge is Power Program, "KIPP Foundation," available at http://www.kipp.org/schools/kipp-foundation.

Conclusion

This paper is intended to provoke a new way of thinking about human capital investment. It proposes using a financing tool used in one context (affordable housing), and applying it to another (education). If the proposal has any merit, a pilot program may be an appropriate next step. The pilot could be administered at the government level or possibly by a foundation that is willing to commit funds that mimic tax credits. In either case, a pilot would expand our understanding of the program's practical applicability should it be scaled on a larger basis.

In the meantime, more attention should be paid to high-poverty schools. Public schools play a unique role in our communities. The quality of a neighborhood's public schools is highly predictive of community stability. From a community development standpoint, improving schools may have far more impact than affordable housing, job training, or small business development (three typical community development interventions). Of course, it is difficult to improve school quality without simultaneously improving the community in which they operate, which argues for investment in affordable housing, job training programs, and small business development. A charter school tax credit would align incentives to achieve both. Schools could, effectively, play the role of community "quarterback," helping to organize and facilitate community development projects that support its students and the neighborhood at large.[98]

Investment tax credits have been traditionally used to raise funds for physical capital development. And yet, physical assets such as housing and facilities can only go so far as community development strategies. What is needed to complement conventional tax credits is a program that raises funds for human capital development. At a recent Federal Reserve conference Preston Pinkett, head of Prudential's Social Investment Program, commented that:

> I would say the way to play in this game [community development] is to not play as an arms-length lender hoping that you might get repaid at some interest rate that doesn't cover the cost of capital, in some period of time, but really to jump in like an equity investor would, like a private equity investor, a venture capitalist who says, Hey I own this community…. If we act like we are equity investors as opposed to lenders, and we participate like it matters, because it does, I think we have a chance to grapple with this.[99]

A charter school tax credit would formalize that sentiment, creating an equity-like investment structure to support students in high-poverty communities. Furthermore, if the financial incentives are aligned correctly, schools and their tax credit investors may adopt new strategies, such as supporting early childhood programs, to make sure children show up "school ready" to learn in order to protect their mutual investment in students' success.

The charter school tax credit reflects this broader view of education reform. Schools of all kinds need funding sources that match their operational needs. In the case of charter schools serving low-income students, those needs tend to be diverse and require funding flexibility. An investment tax credit structure could deliver this flexible funding to a diverse network of locally administered charters operating in challenging, high-poverty environments.

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98 The concept of a "community quarterback" is discussed at length in Erickson, *The Housing Policy Revolution*.

99 Preston Pinkett, *Healthy Communities Conference*, Federal Reserve Board of Governors, July 13, 2010, available at www.frbsf.org/cdinvestments/conferences/hc/docs/transcripts/hc2010_transcript_pinkett.pdf.

References

Print

Alliance for Excellent Education, *The High Cost of High School Dropouts: What the Nation Pays for Inadequate High Schools* (Washington, DC: Issue Brief, October 2007), available at http://www.all4ed.org/files/archive/publications/HighCost.pdf.

Aud, S., W. Hussar, M. Planty, T. Snyder, K. Bianco, M. Fox, L. Frohlich, J. Kemp, L. Drake, *The Condition of Education 2010* (Washington: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, NCES 2010-028), available at nces.ed.gov/pubs2010/2010028_1.pdf.

Balboni, Elise, et al., *2007 Charter School Facility Finance Landscape* (New York: Local Initiatives Support Corporation, Educational Facilities Financing Center, April 2007).

Balfanz, Robert and Nettie Legters, *Locating the Dropout Crisis* (Baltimore, MD: Johns Hopkins University, CESPAR, Report 70, September 2004), available at www.csos.jhu.edu/crespar/techReports/Report70.pdf.

Balfanz, Robert and Nettie Legters, *The Graduation Gap: Using Promoting Power to Examine the Number and Characteristics of High Schools with High and Low Graduation Rates in the Nation and Each State* (Baltimore, MD: Johns Hopkins University, CSOS Policy Brief, January 2005), available at web.jhu.edu/bin/i/j/Policy_Brief.pdf.

Bipartisan Millennial Housing Commission, Meeting Our Nation's Housing Challenges: Report of the Bipartisan Millennial Housing Commission (Washington, DC: 2002), available at govinfo.library.unt.edu/mhc/MHCReport.pdf.

Bloom, Dan and Ron Haskins, *Policy Brief: Helping High School Dropouts Improve Their Prospects* (Princeton: The Future of Children, Spring 2010), available at www.brookings.edu/~/media/Files/rc/papers/2010/0427_helping_dropouts_haskins/0427_helping_dropouts_haskins.pdf.

Bolton, Emily and Louise Savell, *Towards a New Social Economy: Blended Value Creation Through Social Impact Bonds* (London: Social Finance, March 2010), available at www.socialfinance.org.uk/downloads/Towards_A_New_Social_Economy_web.pdf?phpMyAdmin=53fcc4cffa4a2t4642c4adr430f.

Jeffery Bradach, "Going to Scale: The Challenge of Replicating Social Programs," *Social Innovation Review*, (Stanford University, Spring 2003), available at www.ssireview.org/images/articles/2003SP_feature_bradach.pdf.

Bridgeland, John M., John J. DiIulio, Jr., and Karen Burke Morison, *The Silent Epidemic: Perspectives of High School Graduates*, (Washington: Civic Enterprises, March 2006), available at www.civicenterprises.net/pdfs/thesilentepidemic3-06.pdf.

The Bridgespan Group, *Harlem Children's Zone (HCZ): Transforming the Organization While Scaling Up in a Tightly Defined Local Service Area* (Case Study Series, October, 2004), available at www.bridgespan.org/LearningCenter/ResourceDetail.aspx?id=338.

Budde, Ray, *Education by Charter: Restructuring School Districts* (Andover, MA: Regional Laboratory for Educational Improvement of the Northeast and Islands, 1988), available at www.eric.ed.gov/PDFS/ED295298.pdf.

Center for Research on Education Outcomes (CREDO), *Multiple Choice: Charter School Performance in 16 States*, (Stanford, CA: Stanford University, 2009), available at credo.stanford.edu/reports/MULTIPLE_CHOICE_CREDO.pdf.

Christensen, Jon, Jacqueline Meijer-Irons, and Robin J. Lake, "The Charter Landscape, 2004-2009," *Hopes, Fears, and Reality: A Balanced Look at American Charter Schools in 2009, 5th ed.* (Bothell, WA: National Charter School Research Project Center on Reinventing Public Education University of Washington Bothell, January 2010), available at www.crpe.org/cs/crpe/download/csr_files/pub_ncsrp_hfr09_jan10.pdf.

Dickson, Alison H., et al., *Earnings and Poverty Consequences of Dropping Out of High School in the Los Angeles Metro Area* (Boston: Center for Labor Market Studies, Northeastern University, 2009), available at cdd.lacity.org/pdfs/Oct09_DropoutsPathtoPoverty.pdf#zoom=75.

Dinkins, David, "Don't Fear Columbia," *The New York Times*, May 27, 2007, available at www.nytimes.com/2007/05/27/opinion/27CIdinkins.html?_r=1&scp=5&sq=Harlem+Children%27s+Zone&st=nyt.

Dockery, Jennifer, "Google's Investment in Affordable Housing Gets Results," *Novogradac Journal of Tax Credits*, 1(VI), June 2010, available at www.novoco.com/journal/2010/06/novogradac_jtc_2010-06_lihtc_pg14.pdf.

Dynarski, Susan, et al., *Charter Schools: A Report on Rethinking the Federal Role in Education* (Washington: Brown Center on Education Policy at Brookings Institution, December 16, 2010), available at www.brookings.edu/~/media/Files/rc/reports/2010/1216_charter_schools/1216_charter_schools.pdf.

Editorial Projects in Education Research Center, *Diplomas Count 2008: School to College: Can State P-16 Councils Ease the Transition?* (Bethesda, MD: Education Week, 2008).

Education Sector, *Growing Pains: Scaling Up the Nation's Best Charter Schools* (Washington: Education Sector Reports, November, 2009), available at www.educationsector.org/sites/default/files/publications/Growing_Pains.pdf.

Education Trust, *Education Watch National Report* (Washington, DC: April 2009), available at www.edtrust.org/sites/edtrust.org/files/USA_0_0.pdf.

Erickson, David, *The Housing Policy Revolution: Networks and Neighborhoods*, (Washington, DC: Urban Institute Press, 2009).

Galloway, Ian "Create a More Robust Market by Attracting Individual Investors," *Innovative Ideas for Revitalizing the LIHTC Market* (Federal Reserve Bank of St. Louis, 2009), available at www.clevelandfed.org/Community_Development/data/LIHTC_report.pdf.

Government Accounting Office, "Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program" (GAO/T-GGD/RCED-97-149), available at www.novoco.com/low_income_housing/resource_files/research_center/opp_improve_march97.pdf.

Hart, Betty and Todd Risley, "The Early Catastrophe: The 30 Million Word Gap," *American Educator*, vol. 27 no. 1, Spring 2003.

Heckman, James J. and Dimitriy V. Masterov, *The Productivity Argument for Investing in Young Children* (T.W. Schultz Award Lecture at the Allied Social Sciences Association annual meeting, Chicago, January 5-7, 2007), available at jenni.uchicago.edu/human-inequality/papers/Heckman_final_all_wp_2007-03-22c_jsb.pdf.

Henderson, Anne and Nancy Berla, eds., *A New Generation of Evidence: The Family is Critical to Student Achievement* (Washington: National Committee for Citizens in Education, 1994), available at eric.ed.gov/PDFS/ED375968.pdf.

Higgins, Monica and Frederick M. Hess, "The Challenges for Charter Schools: Replicating Success," (Washington: American Enterprise Institute for Public Policy Research, *Education Outlook*, No. 4, April 2009), available at www.aei.org/docLib/04%20EduO%20Higgins-Hess-g.pdf.

Joint Center for Housing Studies, *The Disruption of the Low-Income Housing Tax Credit Program: Causes, Consequences, Responses, and Proposed Correctives* (Boston: Harvard University, December 2009), available at www.jchs.harvard.edu/publications/governmentprograms/disruption_of_the_lihtc_program_2009.pdf

Kohn, Alfie, *The Case Against Standardized Testing: Raising the Scores, Ruining the Schools* (Portsmouth, NH: Heinemann, 2000).

Lattman, Peter and Diana Henriques, "Speculators are Eager to Bet on Madoff Claims," *The New York Times*, December 13, 2010, available at dealbook.nytimes.com/2010/12/13/speculators-are-eager-to-bet-on-madoff-claims/.

Lochner, L. J. and E. Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-reports," *American Economic Review*, 94(1), 2004.

Los Angeles Times, editorial, "Housing Credit Extension is a Must–and Riots Tell Us Why," June 2, 1992, B6.

Mathews, Kay, "Due to 'No Child Left Behind' Law, Some States Lowered Standards," *Digital Journal*, October 30, 2009, available at www.digitaljournal.com/article/281335.

Medina, Jennifer, "Los Angeles Schools to Seek Sponsors," *The New York Times*, December 15, 2010, available at www.nytimes.com/2010/12/16/education/16naming.html.

National Center for Education Statistics, *Mapping 2005 State Proficiency Standards Onto the NAEP Scales: Research and Development Report*, (Washington, DC: U.S. Department of Education, Institute of Education Sciences, June 2007), available at nces.ed.gov/nationsreportcard/pubs/studies/2007482.asp.

National Congress for Community Economic Development (NCCED), "Reaching New Heights: Trends and Achievements of Community-Based Development Organizations," *5th National Community Development Census* (Washington, DC: 2005), available at www.ncced.org/documents/NCCEDCensus2005FINALReport.pdf.

Novogradac, Michael, "Remaking the Case for Tax Credits," *Novogradac Journal of Tax Credits*, II(I), January 2011, available at http://www.novoco.com/journal/2011/01/news_ww_201101.php.

Rather, Dan, *60 Minutes*, CBS News, "The Texas Miracle; Texas Schools Cooking the Books?" January 7, 2004.

Roberts, Benson, "Using Federal Funding to Mobilize private Capital," *The Next American Opportunity: Good Policies for a Great America*, (Philadelphia: PA, Opportunity Finance Network, 2008), available at http://www.nextamericanopportunity.org/ffi/private-capital/.

Rothstein, Richard, "Whose Problem is Poverty?" *Education Leadership* (Alexandria, VA: ASCD, vol. 65 no. 7, April 2008), available at www.ascd.org/publications/educational-leadership/apr08/vol65/num07/Whose-Problem-Is-Poverty%C2%A2.aspx.

Such, Catherine, "Low Income Housing Tax Credits," (San Francisco, CA: Federal Reserve Bank of San Francisco, *Community Investments*, March 2002), available at www.frbsf.org/publications/community/investments/cra02-2/lowincome.pdf.

Sum, Andrew, et al., *The Consequences of Dropping Out of High School* (Boston: Northeastern University, October 2009), available at www.clms.neu.edu/publication/documents/The_Consequences_of_Dropping_Out_of_High_School.pdf.

Tough, Paul, "The Harlem Project," *The New York Times*, June 20, 2004, available at www.nytimes.com/2004/06/20/magazine/the-harlem-project.html?scp=1&sq=The+Harlem+Project&st=nyt.

U.S. Department of Education, "School Improvement Grants," *Federal Register*, 75 (208), Thursday, October 28, 2010, available at www2.ed.gov/programs/sif/2010-27313.pdf.

U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2004* (Washington, DC: US Government Printing Office, Indicator 10, 2004).

Viadero, D. and R. Johnston, "Lifting Minority Achievement: Complex Answers," *Education Week*, 19 (30), April 5, 2000.

Zimmer, Ron, Brian Gill, Kevin Booker, Stephane Lavertu, Tim R. Sass, and John Witte, *Charter Schools in Eight States Effects on Achievement, Attainment, Integration, and Competition* (Santa Monica, CA: RAND Corporation, RAND Education Monograph Series, 2009), available at www.rand.org/pubs/monographs/2009/RAND_MG869.pdf.

Electronic

Alliance for Excellent Education, "Dropout Factories," available at www.all4ed.org/about_the_crisis/schools/dropout.

Bernanke, Ben, interview by Scott Pelley, *60 Minutes*, CBS News, December 3, 2010 (transcript), available at www.cbsnews.com/stories/2010/12/03/60minutes/main7114229_page4.shtml?tag=contentMain;contentBody.

Editorial Projects in Education Research Center, "Achievement Gap," *Education Week*, September 10, 2004, available at www.edweek.org/ew/issues/achievement-gap/.

The Education Trust, "Dispelling the Myth: Success Stories," available at www.edtrust.org/dc/resources/success-stories.

GiveWell, "Knowledge is Power Program," available at www.givewell.org/united-states/education/top-charities/KIPP.

Harlem Children's Zone, "About Us: The HCZ Project," available at www.hcz.org/about-us/the-hcz-project.

Harlem Children's Zone, *Whatever It Takes: A White Paper on the Harlem Children's Zone* (2009), available at www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HCZ%20FINAL%20WHITE%20PAPER%20SHORT%20VERSION.PDF.

K12 Academics, "Standardized Testing," available at www.k12academics.com/standardized-testing.

Karp, Sarah, "One in Ten Charter Students Transfers Out," *Catalyst Chicago*, November 9, 2010, available at www.catalyst-chicago.org/news/index.php?item=2653&cat=5.

Knowledge is Power Program, "About KIPP," available at www.kipp.org/about-kipp.

Knowledge is Power Program, "About KIPP: Five Pillars," available at www.kipp.org/about-kipp/five-pillars.

Knowledge is Power Program, "KIPP Foundation," available at http://www.kipp.org/schools/kipp-foundation.

Low Income Housing Tax Credit, United States Code: Title 26, Section 42, available at frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+26USC42

National Center for Fair & Open Testing, "What's Wrong with Standardized Tests," available at www.fairtest.org/facts/whatwron.htm.

National Council for State Housing Agencies (NCSHA), "Housing Credit Fact Sheet 2010," available at www.ncsha.org/system/files/resources/Housing+Credit+Fact+Sheet.pdf.

National Education Association (NEA), "Issues and Actions: More Issues: Charter Schools," available at www.nea.org/home/16332.htm.

Novogradac and Company, "LIHTC Facts and Figures," available at www.novoco.com/low_income_housing/facts_figures/index.php.

O'Brien, Eileen M. and Chuck Dervarics, "Charter schools: Finding out the Facts: At a Glance" (Alexandria, VA: Center for Public Education, 2009), available at www.centerforpubliceducation.org/Main-Menu/Organizing-a-school/Charter-schools-Finding-out-the-facts-At-a-glance/default.aspx.

Pinkett, Preston, *Healthy Communities Conference*, Federal Reserve Board of Governors, July 13, 2010, available at www.frbsf.org/cdinvestments/conferences/hc/docs/transcripts/hc2010_transcript_pinkett.pdf.

U.S. Department of Education, "Fiscal Year 2010 Budget Summary: Promise Neighborhoods," (Section III. A. Elementary and Secondary Education, May 7, 2009), available at https://ed.gov/about/overview/budget/budget10/summary/edlite-section3a.html#promise.

U.S. Department of Education, "Fiscal Year 2010 Budget Summary: What Works and Innovation Fund," (Section III. A. Elementary and Secondary Education, May 7, 2009), available at https://ed.gov/about/overview/budget/budget10/summary/edlite-section3a.html#whatworks.

U.S. Department of Education, "Race to the Top: Executive Summary," (November 2009), available at www2.ed.gov/programs/racetothetop/executive-summary.pdf.

U.S. Department of Education, "School Improvement Fund," available at www2.ed.gov/programs/sif/index.html

The White House, "President Obama's Fiscal 2010 Budget," available at www.whitehouse.gov/omb/fy2010_key_education/.

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